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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,962	10/19/2001	John Francis Dufort	32414.24.1	2216

22859 7590 11/28/2003

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EXAMINER

MASINICK, MICHAEL D

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 11/28/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/806,962

Applicant(s)

DUFORT, JOHN FRANCIS

Examiner

Michael D Masinick

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32 and 36-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32 and 36-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

Applicants amendments and arguments are not found to be persuasive.

First, it is important to point out that there were two affidavits signed by Alexander Shek submitted in the Information Disclosure Statement. It appears from the applicants arguments that only the affidavit signed Feb 14th, 2001 was relied upon for arguments, when examiner was in-fact relying on the affidavit signed on July 24th, 2003. This confusion does not change the patentability of the current claims. Both affidavits will be relied upon collectively as the "Shek affidavits".

Applicants arguments are based on the premise that the company represented by Shek did not ever publicly disclose the method of producing these lithophane articles. Applicant has cited case law W.L. Gore & Associates, Inc. v. Garlock, Inc. While this case law seems similar at first glance, it is unrelated to the case. The Shek affidavits do not claim that Shek or the company represented by Shek to be the original inventor(s) of this lithophane article and method of making. In this case, the public use is clearly shown in that Shek and his company were clearly hired to produce these lithophanes by another (see appendix to Shek Affidavite dated Feb 14, 2001). Any nonconfidential use of an invention may be a public use. These lithophane articles were produced and available for public sale as early as 1991. The method of production of these articles is likewise known by the public if it is known by one person (Shek qualifies as this person) other than the original inventor, who is unknown.

Claims are rejected under the same art as previously used. Any reference to the "Shek Affidavit" should be viewed as a reference to both affidavits signed by Shek.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 32, 36-42, 48 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Affidavits signed by Alexander Shek.

3. The Shek affidavit shows a method of forming a plastics article through which an image is observable when the article is illuminated with light from behind due to variations in the thickness of the material of the article corresponding to variations in intensity of the image to be observed, the method comprising the steps of: determining the relative intensity at different points of an image, converting the determined relative intensity into data for controlling a mould forming machine; automatically forming a mould in which the relief on the mould surface corresponds to the determined relative intensity, and moulding the article in the mould, the article being moulded from translucent plastics material including a pigmentation.

4. Referring to claim 36, Shek shows where the article has thicker portions corresponding to the darker regions of the original image, and thinner portions corresponding to the lighter regions of the original image.

5. Referring to claim 37, Shek shows where the relative intensities of the different points of the original image is determined by scanning the image into a computer.

Art Unit: 2125

6. Referring to claim 38, Shek shows where the image is analyzed by dividing this into separate picture elements, and determining the intensity of each picture element. Examiner notes that this concept is inherent to modern computer scanners by saving pictures as rows of pixels where each pixel has a color value and intensity associated with it.
7. Referring to claim 39, Fuller shows where a value corresponding to the intensity of each picture element is stored in memory (Inherent to any computer scanning system).
8. Referring to claim 40, Shek shows where the mould is formed of metal.
9. Referring to claim 41, Shek shows where the step of forming the mould is an engraving step.
10. Referring to claim 42, Shek shows where the engraving step is achieved using a numerically controlled engraving machine.
11. Referring to claim 48, Shek shows where the article is a non-flat article.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavits as shown above in view of U.S. Patent No. 5,925,500 to Yang et al.
14. Shek does not show where the engraving step is laser engraving.

Art Unit: 2125

15. Laser engraving is well known in the art as being a quick way to easily remove small amounts of a material.

16. Yang et al shows the use of laser engraving to create printing plates (Column 1).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the laser engraving method of Yang to produce the engraved lithophane articles of Shek because printing plate consists of virtually the same three dimensional pattern as a lithophane, and according to Column 1, lines 35-38 of Yang, "Such plates offer... durability and ease with which they can be made".

18. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavits in view of US Patent No. 5,116,533 to Grandmont et al.

19. Shek does not show the use of a luminescent particles or providing a luminescent layer on or in the article.

20. Grandmont shows a moldable wax based marker containing phosphorescent particles.

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the phosphorescent particles of Grandmont in the article created by the method of Shek because (as taken from Grandmont Col 1, lines 14-21) "It has long been recognized that the appeal of certain toys can be enhanced by imparting phosphorescent properties to the various elements thereof."

22. Claim 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Shek Affidavit to Herman Fuller in view of US Patent No. 5,503,583 to Hippely et al.

Art Unit: 2125

23. Shek does not show the creation of lithophanes with a heat sensitive material whose light transmissive properties vary dependant upon the temperature of the material or a color layer.

24. The use of thermochromic materials is well known. Hippely shows a child's toy painted with a thermochromic paint in order to provide various patterns, designs, letters, and numbers according to differing temperatures.

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the thermochromic temperature sensitive materials of Hippely in the lithophane article creation method of Shek because children are entertained by color changes as shown in Hippely Col 1, line 50 – Col 2, line 5.

26. Claims 49-51 are rejected for the same reasons as the claims they are based upon.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and to the state of the art at the time of invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D Masinick whose telephone number is (703) 305-7738. The examiner can normally be reached on Mon-Fri, 7:30-4:00. Examiner can also be reached quickly via email at Michael.Masinick@uspto.gov.

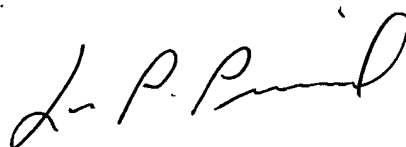
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the

Art Unit: 2125

organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

mdm
November 25, 2003

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**